Third Grade
2016 Science Standards Resource Guide

Physical Science				
2016 Indiana Academic Standards	**Clarifying Statements**	**Vocabulary**	**Crosscutting Concept**	**Disciplinary Core Idea**
3.PS.1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.				PS2.A: Forces and Motion
3.PS.2 Identify types of simple machines and their uses. Investigate and build simple machines to understand how they are used.		-Lever -Pulley -Inclined Plane -Wedge -Screw -Wheel and Axle	Systems and System Models	PS2.A: Forces and Motion
3.PS.3 Generate sound energy using a variety of materials and techniques, and recognize that it passes through solids, liquids, and gases (i.e. air).			Energy and Matter	PS3.A: Definitions of Energy PS4.A: Wave Properties
3.PS.4 Investigate and recognize properties of sound that include pitch, loudness (amplitude), and vibration as determined by the physical properties of the object making the sound.			Energy and Matter	PS3.A: Definitions of Energy PS4.A: Wave Properties

Third Grade
2016 Science Standards Resource Guide

Updated: 06/13/2016

Third Grade
2016 Science Standards Resource Guide

Earth and Space Science				
2016 Indiana Academic Standards	**Clarifying Statements**	**Vocabulary**	**Crosscutting Concepts**	**Disciplinary Core Idea**
3.ESS.1 Obtain and combine information to determine seasonal weather patterns across the different regions of the United States.			Patterns	ESS2.D: Weather and Climate
3.ESS.2 Develop solutions that could be implemented to reduce the impact of weather related hazards.		-Tornado -Hurricane -Thunderstorm -Tsunami -Landslide -Flood	Cause and Effect	ESS2.D: Weather and Climate ESS3.B: Natural Hazards
3.ESS.3 Observe the detailed characteristics of rocks and minerals. Identify and classify rocks as being composed of different combinations of minerals.		-Igneous -Sedimentary -Metamorphic	Structure and Function	ESS2.A: Earth's Materials and Systems
3.ESS.4 Determine how fossils are formed, discovered, layered over time, and used to provide evidence of the organisms and the environments in which they lived long ago.			Cause and Effect Structure and Function	ESS1.C: The History of Planet Earth

Third Grade
2016 Science Standards Resource Guide

Life Science				
2016 Indiana Academic Standards	**Clarifying Statements**	**Vocabulary**	**Crosscutting Concepts**	**Disciplinary Core Ideas**
3.LS.1 Analyze evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.		-Inherited -Acquired -Traits	Structure and Function Stability and Change	LS3.A: Inheritance of Traits LS3.B: Variation of Traits
3.LS.2 Plan and conduct an investigation to determine the basic needs of plants to grow, develop, and reproduce.			Structure and Function	
3.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.			Structure and Function Stability and Change	LS1.A: Structure and Function LS1.B: Growth and Development of Organisms

3.LS.4 Construct an argument that some animals form groups that help members survive.			Stability and Change	LS2.D: Social Interactions and Group Behavior

Third Grade
2016 Science Standards Resource Guide

Engineering				
2016 Indiana Academic Standards	**Clarifying Statements**	**Vocabulary**	**Crosscutting Concepts**	**Disciplinary Core Ideas**
3-5.E.1 Identify a simple problem with the design of an object that reflects a need or a want. Include criteria for success and constraints on materials, time, or cost.			Scale, Proportion, and Quantity Systems and System Models	ETS1.A: Defining and Delimiting an Engineering Problem
3-5.E.2 Construct and compare multiple plausible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.				ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution
3-5.E.3 Construct and perform fair investigations in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.			Systems and System Models	